The benzofuran series. G. Villere and V. Grinšteins. *Latvijas Valsts Univ. Ķim. Fak. Zinātniskie Raksti* 22, No. 6, 129–35(1958).—(R in this abstr. = isonicotinoyl.) 3-Oxo-2,3-dihydrobenzofuran (I) refluxed 5 hrs. with $RNHNH_2$ (II) and the unreacted material extd. from the mixt. with Et_2O left the hydrazone, m. 187–8°. Similar treatment of I with $NCCH_2CONHNH_2$ (III) did not give the corresponding compd., even under pressure, and I could also not be condensed in this way with $H_2NCSNHNH_2$ (IV). 2-Acetylbenzofuran (V), however, could be condensed with II to the hydrazone, m. 229–30°, and III and V refluxed 5 hrs. in EtOH gave the yellowish hydrazone, m. 195–6°. If the pressure was increased so the mixt. reached 140°, V and IV condensed to the thiosemicarbazone, m. 190–4°. Similarly, 3-amino-2,3-dihydrobenzofuran-HCl and $NCNH_2$ (VI) heated 6 hrs. at 150° in EtOH in a sealed ampul and CO_2 passed through the mixt. gave 3-guanidino-2,3-dihydrobenzofuran carbonate, m. 150–1°. V, EtOH, AcOH, and Na-Hg at 40–50° gave 1-(2-benzofuryl)ethylamine-HCl (VII), m. 159–62°. VI and VII heated 8 hrs. in EtOH, and the mixt. treated with NaOH then CO_2 yielded [1-(2-benzofuryl)ethyl]guanidine carbonate, m. 102–18° (decompn.).

Werner Jacobson

PHASE I BOOK EXPLOITATION SOV/4226

Riga. Universitate

Uchenyye zapiski, t. 14, Khimicheskiy fakul'tet, 4 (Scientific Notes, Vol 14, Chemistry Faculty, 4) Riga, 1957. 251 p. 550 copies printed.

Eds. (Title page): A.F. Ivevin'sh, Professor, Doctor of Chemistry; L.K. Lepin', Member of the Academy of Sciences Latviyskaya SSR, Professor, Doctor of Chemistry; G.Ya. Vanag, Professor, Doctor of Chemistry; Tech. Ed.: A. Peterson.

PURPOSE: This book is intended for inorganic chemists and scientists in the ceramics industries.

COVERAGE: The book contains 22 articles on organic chemical synthesis and analysis and the physicochemical properties and compositions of ceramic and refractory materials. No personalities are mentioned. Figures, tables, and references accompany the articles.

2. Ianson, E., A. Ivevin'sh, and E. Gudrinietes. The Use of Sodium Tetraphenylboron in Quantitative Analysis 9

3. Grosbergs, A., A. Veiss, and J. Alksnis. The Luminescence of Aluminum Oxide Hydrate 17

4. Balodis, Yu.R. Resistance of the Boundary Layer, Electrode Potential, and the Corrosion of Aluminum in Aluminum Sulfate Solutions 25

5. Vanag, G.Ya. Lignin as a Reagent for Qualitative Determination of Aromatic Nitro Compounds 35

6. Vanag, G.Ya., and A.E. Arvin. The Interaction of 2-Bromo-2-phenyl-1, 3-indandione With Primary Amines 47

7. Nomadan, I.A. On the Predicted Mechanism of the Alkylation of Naphthalene and Diphenyl With Alcohols Using a BF_3 Catalyst 49

8. Grinshteyn, V., E. Kalniyn, and G. Villers. Study of Usninic Acid and Its Derivatives 63

9. Grinshteyn, V., and Z. Leyrinia. The Concentration of Phytotoxins of Prunus Padus and Their Influence on Ferments 79

10. Kaplinan, V.P., and P.V. Ollsiank. The Problem of Preliminary Hydrolysis [Pre-hydrolysis] With Water and Acid Before Cooking Cellulose in the Sulphate Process 89

11. Bidzuks, J. Properties of Typical Clays of the Latvian SSR 99

12. Erduk, Yu. Ya. Properties of Gypsum Calcined at Low Temperatures 123

13. Freydenfel'd, E. Zh. The Use of Lignophosphogypsum for the Production of Binding Substances 155

14. Freydenfel'd, E. Zh. The Production of Caustic Dolomite 161

15. Ivezaliniete, A.A., and Yu.Ya. Erduk. Properties of Some Opaque, Easy Melting, Non-lead and Non-Boron Glases for Structural Ceramics 167

16. Freydenfel'd, E. Zh., and J.Ya. Setnalis. The Possibility of Using Nergrama Open-Hearth slag for the Production of Binding Substances 173

17. Erduk, Yu.Ya. Retarders of the Setting Period of Gypsum Calcined at Low Temperatures 179

18. Nakimova, O.S. The Interaction of a Fireclay Refractory With a Fluorine-Containing Glass Batch 195

19. Freydenfel'd, E. Zh., and A.A. Apalis. Physicochemical Properties of Compositions of the System $CaO-BaO-TiO_2$ 201

20. Osolin', J., and J. Eltuks. The Role of Magnesium Oxide in the Production of Silicate Brick From Dolomitic Lime 211

21. Erduk, Yu.Ya., P.G. Paukshe, and O.S. Maksimova. The Influence of Some Technical Factors on the Properties of Enamel Coatings on Cast Iron 221

22. Erduk, Yu.Ya., V.G. Byrne, E.A. Eryna. The Physicochemical Properties of Easy Melting Valence Glases 225

AVAILABLE: Library of Congress

Card 4/4 JA/ma/afm 9/23/58

VILLERE G.

LATVIA/Organic Chemistry - Natural Compounds and Their Synthetic Analogs. G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54148

Author : Villere G., Grinshteins V., Kalninya E.

Inst : Latv. University.

Title : Investigation of Usnic Acid and Its Derivatives.

Orig Pub : Uch. Zap. Latv. un-t, 1957, 14, 63-78.

Abstract : The isolation of (+)-Usnic acid (I) was made from the Usnea Ramalina and the Gladonia varieties of lichens; the concentration of I in Usnea hirta is as high as 3.8%. Usnamide (II), m. p. 251°C. (from acetic acid), was prepared by boiling I with ammonium hydroxide in a mixture of alcohol and benzene, or acetic acid plus sodium acetate. When I is heated at 80°C. for thirty minutes, or at 20°C. for thirty minutes to forty-eight

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LATVIA/Organic Chemistry - Natural Compounds and Their Synthetic Analogs. G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54148

hours with liquid ammonia, there is formed a mixture of products which probably are II and the diamide of I, $C_{18}H_{18}O_5N_2$ (III). The condensation of I with diphenyl hydrazine in alcohol (boiled for 2.5 hours) probably resulted in the formation of bis-diphenyl hydrazone of I, $C_{42}H_{36}O_5N_4$; this material does not melt at 250°C.

It was not possible to prepare the corresponding amines by the reduction of the above compound (or the reduction of II, or the oxime of I).
When alcoholic solutions of nitrogen-containing compounds are boiled with I, condensation products are obtained (given are: the starting material, the composition of of the reaction product, and its melting point in °C);

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LATVIA/Organic Chemistry - Natural Compounds and Their Synthetic Analogs. G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54148

with $N_2H_4 \cdot H_2O$, $C_{18}H_{18}O_4N_4$ was prepared, which product does not melt at 250°C; with $C_2H_5NH_2$, $C_{20}H_{21}O_6N$ was prepared, m. p. 122-123°C. (from alcohol); with $C_6H_5NH_2$, there are formed $C_{24}H_{21}O_6N$, m. p. 221-223°C., and $C_{24}H_{21}O_6N$, m. p. 137-138°C. (both alcohol); with o-$C_6H_4(NH_2)_2$, $C_{24}H_{22}O_6N_2$ was prepared, m. p. 175-176°C.; with p-$NH_2C_6H_4COOH$ (in $C_5H_{11}OH$), $C_{25}H_{21}O_8N$ (OV) was prepared, which product does not melt at 250°C., also fromed

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LATVIA/Organic Chemistry - Natural Compounds and Their Synthetic Analogs. G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54148

was $C_{25}H_{21}O_8N$ (V), m. p. 234-235°C.; with p-$NH_2C_6H_4$··SO_2NH_2 (in $C_5H_{11}OH$), $C_{24}H_{22}O_8N_2$ was prepared (VI), m. p. 224-226°C. The activity of III, IV, V and VI on Mycobacterium tuberculosis was determined in dilutions from 1:100,000 to 1:500,000.

Card 4/4

VILLERT, A.F.; KOSTERIN, Yu.I.

Determination of the total relative absorptive capacity of an asbestos brake lining. Kauch. i rez. 19 no. 11:24-28 N '60. (MIRA 13:11)

(Asbestos)

VILLEVAL'DE, N.D.; LYSANOV, Yu.V.; SKOTNIKOV, V.V.; KHLEBNIKOV, K.K.; YUDIN, M.F.

The 50 Mev. betatron at the All-Union Scientific Research Institute of Meteorology. Prib. i tekh. eksp. 10 no.1:38-43 Ja-F '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii.

Vinnikov, A.

"Heteroptera From The Madagascar Region In The National Museum In Prague. Pt. 6. Reduviidae: Stenopodinae-Acanthaspidinae." p. 1. (Sborník. Acta Entomologica. Vol. 26, No. 378, 1,48-50, Prague.)

Vol. 2, No. 3.

SO: Monthly List of Russ Accessions, Library of Congress, March 1954, Unc.

VILLMANN, Ch.I., red.; GRISHIN, N.I., red.; DIRIKIS, M.A., red.; ROSS, Yu.K., red.; KHVOSTIKOV, I.A., red.; SKVORTSOVA, A., red.; TOOMSALU, E., tekhn. red.

[Transactions of the Conference on Noctilucent Clouds]Trudy Soveshchaniia po serebristym oblakam. 3d, Tallinn, 1961. Tallinn, Akad. nauk Estonskoi SSR, 1960. 139 p. (MIRA 15:12)

1. Soveshchaniye po serebristym oblakam. 3d, Tallinn, 1961. (Clouds)

ZHELNIN, G.A., otv. red.; ORVIKU, K.K., red.; GUDELIS, V.K., red.; SPRINGIS, K.Ya., red.; VILLMANN, Ch.I., red.; PARFENOVA, L., red.; TOOMSALU, E., tekhn. red.

[Conference on the Neotectonic Movements in the Baltic Sea Region; Tallin, 1960] Materialy Soveshchaniia po voprosam neotektonicheskikh divzhenii v Pribaltike, Tallinn, 1960. Tartu, AN Estonskoi SSR, 1960. 154 p. (MIRA 16:9)

1. Soveshchaniye po voprosam neotektonicheskikh dvizheniy v Pribaltike, Tallinn, 1960.
(Baltic Sea Region—Geology, Structural—Congresses)

ORVIKU, K.K., red.; ZHELNIN, G.A., otv. red.; GUDELIS, V.K., red.; SPRINGIS, K.Ya., red.; VILLMANN, Ch.I. [Villmann, C.], red.; PARFENOVA, L., red.; TOOMSALU, E., tekhn. red.

[Materials of the Conference on Recent Tectonic Movements in the Baltic region; Tallinn, March 24 - 26, 1960] Materialy Soveshchaniia po voprosam neotektonicheskikh dvizhenii v Pribaltike, Tallinn, 1960. Tartu, Akad. nauk Estonskoi SSR, 1960. 154 p. (MIRA 14:12)

1. Soveshchaniye po voprosam neotektonicheskikh dvizheniy v Pribaltike, Tallinn, 1960.
(Baltic Sea region—Geology, Structural—Congresses)

VILLMAN, Ch.

Observations of lunar occultations of stars in Tallin. Astron.tsir. no.210:30-31 Ap '60. (MIRA 13:9)

1. Tallinskaya astronomicheskaya observatoriya obshchestva yestestvoispytateley pri AN Estonskoy SSR.
(Occultations)

IKAUNIYEKS, Ya.Ya.[Ikaunieks, J.], otv. red.; VILLMANN, Ch.I.[Villmans,C.], red.; GRISHIN, N.I., red.; DIRIKIS, M.A., red.; KHVOSTIKOV, I.A., red.

[Transactions of the Sixth Conference on Noctilucent Clouds] Trudy 6gó soveshchaniia po serebristym oblakam, Riga, 1961. Riga, Izd-vo Akad.nauk Latviiskoi SSR, 1961. 197 p. (MIRA 15:1)

1. Soveshchaniye po serebristym oblakam, 6th, Riga, 1961. 2. Direktor Astrofizicheskoy laboratorii AN Latviyskoy SSR (for Ikauniyeks).
(Clouds—Congresses)

VILLMANN, Ch.I.

Observations of noctilucent clouds in the North-West region of the Atlantic Ocean and in Estonia in 1961. Astron.tsir. no.225:19-21 S '61. (MIRA 16:1)

1. Tallinskaya astronomicheskaya observatoriya.
(Clouds)

VILLMANN, Ch.

Interpretation of some results of polarimetric investigation of noctilucent clouds. Astron.tsir. no.226:17-21 O '61.
(MIRA 16:1)

1. Tallinskaya astronomicheskaya observatoriya AN Estonskoy SSR.

(Clouds)

34510
S/169/62/000/002/065/072
D228/D301

3,5120

AUTHOR: Villmann, Ch. I.

TITLE: The photographic photometry, polarimetry, and colorimetry of noctilucent clouds

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1962, 23-24, abstract 2G151 (Tr. VI Soveshchaniya po serebristym oblakam, 1959, Riga, AN LatvSSR, 1961, 25-34)

TEXT: Photometric, polarimetric, and colorimetric observations of noctilucent clouds, which were carried out on the territory of the Estonian SSR in 1959, are described. The aim of the observations was to obtain by means of a special photocamera photographs of noctilucent clouds suitable for the determination of: their absolute brightness, their degree of polarization, the position of the polarization plane, and certain color characteristics. In addition the task of the observations included the procurement of photographs, obtained simultaneously from two points located on the photometrically corresponding line. A special photocamera, contain-

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ing three "Jupiter-9" objectives with a focal length of 85 mm and a relative aperture of 1:2, was designed to fulfill these problems. The objectives are attached to the camera one above the other. The shutters of the objectives work simultaneously, with identical exposures. The camera is fitted with an optical vido-viewfinder, level, and azimuthal adjustment. A set of light-filters, three polaroid-analyzers, and a sun hood are attached (detachably) to the camera. A photometric cube was used as the illuminator for obtaining the photometric scale. One problem in observing noctilucent clouds is the determination of the brightness B_c at separate points of a cloud. The magnitude of B_c may be expressed by the formula: $B_c = r_{sc} (b_c - b_{sk}) \times b_{st}^{-1}$, where b_c is the measured brightness of a given point, b_{sk} is the brightness of the twilight sky at the same point but in the absence of clouds, b_{st} is the brightness of a standard screen illuminated by the sun's rays at the moment when

S/169/63/000/001/007/062
D263/D307

AUTHOR: Villmann, Ch.

TITLE: Observations of noctilucent clouds in the north and western part of Atlantica and over Estonia in 1961

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1963, 33, abstract 1A165 (Tsirkulyar Vses. astron.-geol. o-va, 1962, no. 5, 28-31)

TEXT: The observations were carried out from a steamer following the route: Baltic Sea - North Sea - North part of the Atlantic - Island of Newfoundland. Two cases of the appearance of noctilucent clouds were observed, at 20-21 April and 24-25 April. These observations cannot however be regarded as a measure of the frequency of this phenomenon in the Atlantic region, since sightings were hindered by unfavorable meteorological conditions. The observations at Tallinn - Nymm were recorded over the period May 10 - September 1. The noctilucent clouds were photographed with a special three-objective camera to determine the polarization properties of light scat-

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tered by these clouds. 13 separate sightings were recorded. In all these cases the phenomena lasted for a long time, the brightness was moderate, and the wave structure of the clouds was oriented from north to south. In 10 cases out of 13 the clouds exhibited a vortex structure.

[Abstracter's note: Complete translation]

L 26600-66 EWT(1)/FCC GW

ACC NR: AP600962 SOURCE CODE: UR/3010/65/000/016/0097/0101

AUTHOR: Villmann, Ch. I.

ORG: none

TITLE: Investigation of noctilucent clouds

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Geofizicheskiy byulleten', no. 16, 1965, 97-101

TOPIC TAGS: spectrophotometer, photogrammetry, atmospheric cloud, water vapor, twilight

ABSTRACT: Systematic observations of noctilucent clouds were started at the beginning of the IGY. The purpose of these observations was to determine the real height of these clouds, their physical nature, and their origin. The clouds appear infrequently in a narrow latitudinal belt; they can be observed only in summer when the sun is beneath the horizon; and they are characterized by wavy motions and varying brightness.

The problem of the nature of noctilucent clouds is not solved in detail. The solution may reveal the meteorology and chemical processes of the mesosphere, the transfer of water vapor, and the accumulation of cosmic and terrestrial dust. Magneto-dynamic processes in the atmosphere may also play some role in the formation of noctilucent clouds.

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L 26600-66

ACC NR: AP6009624

The program for the investigation of noctilucent clouds is divided into several categories. The time-space distribution of noctilucent clouds is studied with the special stereophotogrammetric instruments of a station network. The physical and chemical nature of these clouds results from the optical peculiarities of particles forming them, their volumetric density, their brightness, and the thickness of details. The stereophotogrammetric observations combined with motion pictures make it possible to determine a cloud's motions and details.

The formation process of noctilucent clouds was investigated on the basis of observation and experimental data. The solution of this problem is associated with studies of their physical parameters and photochemical processes, as well as the accumulation of meteoric matter and water vapor in the mesosphere. It is probable that water is formed in the upper atmospheric layers from oxygen and hydrogen, the latter being of cosmic origin. The solution of the tasks enumerated can lead to an understanding of processes occurring in the mesosphere.

The program of Soviet scientists for studies of noctilucent clouds during the IGY and the IGCC included the tasks mentioned above. This research is being directed by a group of scientists associated with the Section of Meteorology and Physics of the Atmosphere at the Joint Geophysical Com-

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L 26600-66
ACC NR: AP6009624

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mittee of the Presidium of the Academy of Sciences USSR. The leading figure in the investigations is Professor I. A. Khvostikov. The Headquarters of the Global Special Geophysical Center for Noctilucent Clouds is now located at the Tartu Astrophysical Observatory im. V. Struve, which is associated with the Institute of Physics and Astronomy of the Estonian Academy of Sciences. Observations of noctilucent clouds have been made at this observatory in the past.

A group of scientists at the Tartu Observatory is in charge of the observations of noctilucent clouds. The group is equipped with modern instruments for optical and stereophotogrammetric observations and also gathers and processes observation data from all the stations in the USSR. The head office of the Hydrometeorological Service has 206 stations, which cover a belt of the USSR whose width between latitudinal parallels is 23° 57' and whose length is 155° 18' between longitudinal meridians.

During the IGCC, optical control stations observed the appearance of noctilucent clouds each night at the mean and dark phases of twilight. In 1965 the visual method was replaced by a method of perforated cards. Optical ground stations investigate the physical nature of particles forming a cloud, and high-precision stereophotogrammetric observations of the

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ACC NR: AP6009624

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spatial distribtuion and kinematic characteristics of the clouds are made. A special photoelectric spectrophotometer has been used since 1965 for photometric, polarimetric, and colorimetric investigations of noctilucent clouds. The Tartu Astrophysical Observatory has a basis of 50 km from which stereophotogrammetric observations are carried out. Orig. art. has: 1 figure. [ATD PRESS: 4218-F]

SUB CODE: 04 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 003

Card 4/4 BLG

L 42108-66 EWT(1)/EEC GW

ACC NR: AP6022227 SOURCE CODE: UR/0362/66/002/006/0672/0676

33
59
B

AUTHOR: Villmann, Ch. I.; Avaste, O. A.

ORG: none

TITLE: Noctilucent cloud symposium

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 6, 1966, 672-676

TOPIC TAGS: meteorologic conference, atmospheric cloud, cloud level, atmospheric ion, atmospheric optic phenomenon, atmospheric moisture, cloud formation, cosmic dust, atmospheric scatter, atmospheric temperature gradient, atmospheric radiation, spaceborne atmospheric observation

ABSTRACT: An international symposium on noctilucent clouds was held in Tallin from 15 to 18 March 1966 under the auspices of the International Association of Atmospheric Meteorology and Physics, the World Meteorological Organization, and a special committee of IQSY. Soviet participants read the following papers:

Speaking on the climatology of noctilucent clouds, Ch. I. Villmann proposed the establishment of an international noctilucent cloud patrol network similar to that already existing in the Soviet Union. IQSY data on noctilucent clouds obtained in the USSR have shown that the maximum frequency of occurrence is in July. Data on the height characteristics

UDC: 551.576.1:551.593.653

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L 42208-66

ACC NR: AP6022227

of noctilucent clouds over Estonia obtained by stereophotogrammetry, M. I. Burov reported, have shown that 1) the height of the clouds varies from 65 to 95 km, and 2) height readings varying by about 13 km were recorded for a single instance of cloud occurrence.

I. A. Khvostikov and I. M. Kravchenko examined the processes that increase the concentrations of H_2O molecules in the mesosphere. They further discussed the mechanism of the so-called "solar rain" and the rate of hydrogen accretion during the interaction of the solar wind plasma with the terrestrial magnetosphere. In effect, they computed the rate of H_2O molecule formation in the upper layers of the atmosphere from hydrogen of solar origin.

N. N. Shefov showed that in the noctilucent cloud zone the intensity of the hydroxyl OH emission bands increases at about twice the normal rate while noctilucent clouds are developing. On the night following the appearance of the noctilucent clouds the OH emission decreases 2—3 times below its average value, and then returns again to its previous level. This effect is a quantitative indicator of the variation of the chemical composition of the atmosphere at heights of about 80 km, as well as of the rate of vertical mixing in these layers.

K. Ya. Kondrat'yev, I. Ya. Badinov, S. D. Andreyev, V. B. Lipatov, and V. N. Konashenko discussed the results of optical and condensation

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L 12108-66

ACC NR: AP6022227

measurements of moisture in the stratosphere. Spectroscopic investigations, conducted in 1964—1965 by spectrophotometric balloon lofted to heights of 30—32 km, have confirmed that the stratosphere is comparatively dry — the mixture ratio is $10^{-6}/5 \cdot 10^{-6}$ g/g. The authors note that many investigators who detect high moisture values in the stratosphere have introduced substantial errors in their experiments by not taking into account the water vapor adsorbed on the walls of the spectrometers. The authors theoretically analyzed the possible stratification of water vapor between 30 and 100 km, taking into consideration the photochemistry and the general circulation of the atmosphere. Their work shows that at heights of 70—90 km there are sufficient concentrations of water vapor to concentrate and form noctilucent clouds.

V. G. Fesenkov noted that on the basis of measurements of the brightness of twilight at symmetrical points of the solar vertical in cases of large angles of solar depression it is possible to study the distribution of cosmic dust and the optical thickness of the layers in which noctilucent clouds occur. This contention was confirmed by observations made in the Astrophysical Observatory of the Kazakh Academy of Sciences.

Using theoretical works, the results of aircraft observations, searchlight sounding data, and measurements of the brightness of the twilight sky obtained from ground observations and observations made in the Voskhod spaceship and Vostok-6, G. V. Rozenberg, A. B. Sandomirskiy,

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ACC NR: AP6022227

and V. K. Pyldmaa examined the height distribution of the aerosol coefficient of scattering in the real atmosphere at different wavelengths. These methods permitted the study of aerosols in the 2—200-km height interval, where the coefficient of scattering changes by three orders of magnitude. Observations at different geographic points and in different seasons confirm that very often the maximum of aerosol concentration is at heights of 15—22 km, while the minimum of turbidity is at heights of 25—30 km. The results of the different experimental investigations agree. It is found that the turbidity of the air in layers higher than 30 km is relatively great and that the coefficient of scattering there in the blue spectral region is double the molecular coefficient of scattering. In the red spectral region this ratio reaches 6—7:1. Rozenberg and others have noted that aerosol layers are often encountered at heights of 42—44 km and near 70 km.

A. V. Fedynskiy discussed the results of instrument measurements of water vapor concentrations in the mesosphere made by rockets at heights from 68 to 95 km. The measurement device worked on the principle of measuring the heat emission from a heated filament in the presence of water vapor. According to the data obtained, the water vapor is distributed in a layer 13—14 km thick. The water vapor tension at 79 km was of the order of $3 \cdot 10^{-5}$ mm Hg. Experiment error was put at 40%.

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ACC NR: AP6022227

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N. I. Grishin examined the morphological structure of noctilucent clouds, which is determined by the thermodynamic processes in the mesosphere and mesopause. Time-lapse photography introduced in 1953 has revealed the wave-like nature of the clouds as well as other dynamic characteristics. Two noctilucent cloud layers moving in different directions and having different morphological structures have been identified on the basis of such photographic material.

B. N. Trubnikov and I. S. Skuratova reported on the distribution of moisture in the noctilucent cloud zone as an indicator of instability with respect to the wet adiabatic temperature gradient. Since the temperature gradient at these heights exceeds the wet adiabatic gradient, convective movements are observed. Rayleigh-Chandrasekhar convection equations were also examined.

A. I. Ivanovskiy analyzed the dispersion equation obtained from a system of hydrodynamics equations taking into account radiation absorption and heat radiation of the atmosphere. This investigator showed that gravitational waves can be self-generated during radiation cooling of the atmosphere. L. P. Zhukova and B. N. Trubnikov discussed the penetration of gravitational waves from the troposphere into the stratomesosphere and

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ACC NR: AP6022227

quantitatively investigated the hypothesized formation of a mesostructure of the noctilucent cloud field due to the gravitational waves. The symposium represented the first international geophysical undertaking since IQSY. Tartu hopes to coordinate worldwide research on noctilucent clouds. [ATD PRESS: 5027-F]

SUB CODE: 04, 05 / SUBM DATE: none

Card 6/6 af

ACC NR: AT6015109 SOURCE CODE: UR/3199/66/000/012/0011/0025

AUTHOR: Villmann, Ch. I.

ORG: none

TITLE: Some aspects of investigating noctilucent clouds

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Meteorologicheskiye issledovaniya, no. 12, 1966, 11-25

TOPIC TAGS: hydrometerology, atmospheric density, meteorologic observation

ABSTRACT: A total of 218 stations make regular observations of noctilucent clouds in the Soviet Union. Of these, 206 operate under the USSR Hydrometeorological Service, while 12 stations are affiliated with the All-Union Astronomical and Geodetic Society. The station network is so arranged (see map below) as to cover all areas of the USSR over which such clouds are likely to occur. The northernmost station is Murmansk, the southernmost is Simferopol'. the easternmost is Anadyr', and the westernmost is Uzhgorod. Latitudinally, the patrol stations cover a belt 23°57' wide, and longitudinally they extend over an area 155°18' in length. The station density is an average of 8.4 stations per degree of latitude, and 1.3 stations per degree of longitude. Considering the geometric conditions of cloud visibility per station and the station network density and distribution, the possibility of observing all appearances of noctilucent clouds is nearly perfect.

Soviet stations report their findings to the Tartu Astrophysical Observatory im. V. Ya. Struve of the Estonian Institute of Physics and Astronomy, which in 1964 was made the World Special Geophysical Center on Noctilucent Clouds by the International Union of Geodesy and Geophysics. [DM]

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ACC NR: AT6015109

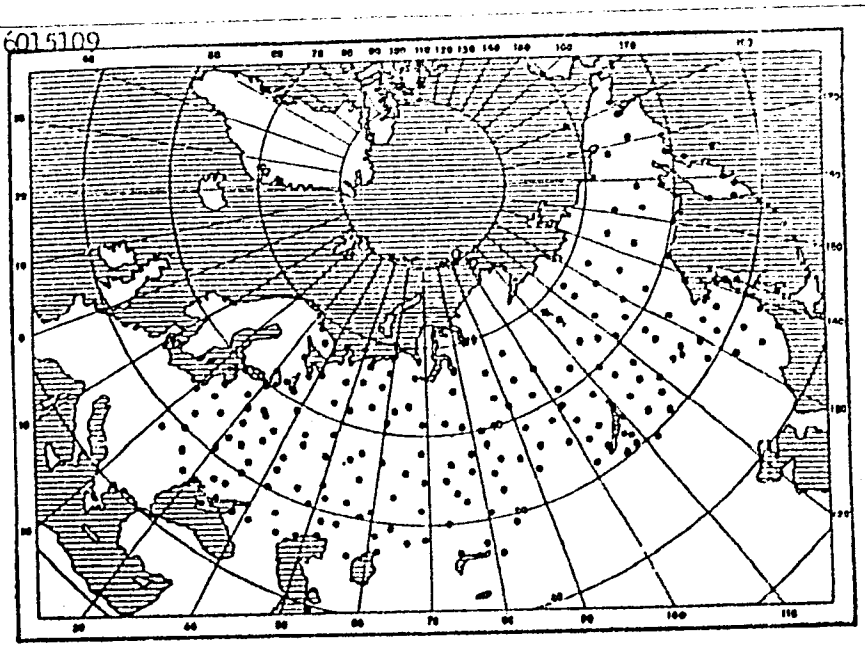

Fig. 1. Distribution of noctilucent cloud observation stations in the USSR

Orig. art. has: 4 figures and 5 tables. [ATD PRESS: 4248-3]

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Card 2/2 SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 017/ OTH REF: 021

VILIMANN, E., aktivistka-obshchestvennitsa (g. Tallin)

With united forces. Zhil.-kom. khoz. 12 no.5:8 My '62. (MIRA 15:10)

(Tallinn—Children—Management)

VILLNER, M.

Effective filling of ammonia shrubbers type Standart.
Paliva 42 no.1:25 Ja '62.

1. Plynarna, Kolin.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001859820006-2"

BOROVSKIY, V.G., inzh.; VILLUNSEN, V.V., inzh.; VYAZOVIKIN, V.N., inzh.; KALINICHEV, G.V., inzh.; LAVYAGIN, A.I., inzh.; LYZO, E.G., inzh.

Improvement in the design of tubular diesel-hammers. Stroi. i dor. mash. 9 no.7:17-19 Jl '64. (MIRA 18:3)

VILLYAMOVSKIY, T.S. (Syzrab')

Acute hematogenic osteomyelitis of the ribs in a 2-weeks-old child. Nov.khir.arkh. no.2:107 Mr-Ap '58 (MIRA 11:6)
(RIBS--DISEASES)

USSR/Farm Animals. Small Horned Stock. Q

Abs Jour: Ref Zhur-Biol., No 20, 1958, 92595.

Author : Yelemanov, A., Villius, V.V., Musin, T.M.
Inst :
Title : An Attempt to Improve the Merino Flock in Kazakhstan.

Orig Pub: Agrobiologiya, 1957, No 6, 34-41.

Abstract: There is a highly productive flock of fine-fleeced sheep at the Beskaragayskiy Sovkhoz in Pavlodarskaya Oblast which yields an average of 3.175 kg of pure fiber per sheep. Breeding work has been conducted on this herd since 1932. Rams of the Rambu'ye, Askaniysk and Altay breeds have been used to improve the herd. Reproduction is now kept "within the bunch". The type of animal desired is a heavy one with a large wool coat of fine fleece having a 46.5%

Card : 1/2

VILLO, I.I. (Penza)

Organization of therapeutic diet in province hospitals. Sov.zdrav. 19 no.12:16-18 '60. (MIRA 14:3)
(PENZA PROVINCE--HOSPITALS--FOOD SERVICE)
(DIET IN DISEASE)

FEYLER, G.O., inzhener; VIL'MAN, B.P., inzhener.

Wear resistance of disk brakes built into electric motors. Vest.elektroprom. 27 no.11:60-64 N '56. (MLRA 9:12)

1. Zavod "Dinamo."
(Electric motors) (Brakes)

L 25623-66 EWT(1)/FCC GW

ACC NR: AT6016061 SOURCE CODE: UR/3174/66/000/057/0071/0076

AUTHOR: Villmann, Ch. I. (Candidate of physico-mathematical sciences)

ORG: Institute of Physics and Astronomy, Academy of Sciences Estonian SSR (Institut fiziki i astronomii AN Estonskoy SSR)

TITLE: Importance of noctilucent cloud observations

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955. Informatsionnyy byulleten', no. 57, 1966, 71-76

TOPIC TAGS: noctilucent cloud, luminous cloud, upper atmosphere phenomenon, high level cloud, mesopause

ABSTRACT: The need for systematized climatological studies of noctilucent clouds involving investigations of both the geometry and time-space characteristics of individual occurrences as well as of possible interrelations with increased solar activity, meteor streams, and other extraterrestrial phenomena is expressed. The lack of observational data from the Southern Hemisphere on noctilucent clouds is regretted, though several Antarctic observations have been recorded. Recent observations of noctilucent clouds in the winter reported from Czechoslovakia and Estonia indicate that the clouds may be observed in seasons other than the summer, thus invalidating a long-held theory. All hypotheses concerning noctilucent clouds should be subjected to critical scientific analysis and checked against available

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L 25623-66

ACC NR: AT6016061

statistical data. It is hoped that the newly established World Special Geophysical Center of Noctilucent Cloud Studies in Tartu, Estonia, will aid in this work. Orig. art. has: 1 figure. [DM]

SUB CODE: 04/ SUBM DATE: 02Jul65/ ORIG REF: 008/ OTH REF: 007/ ATD PRESS: 4255

Card 2/2

VILMANE, M.; ZUMBERGA, M., red.

[Narcissuses] Narcises. Riga, Latvijas PSR Zinatnu akad. izd-ba, 1963. 39 p. [In Latvian] (MIRA 17:7)

VILMANE, M. (Riga)

Results in hybridization of gladioli. Vestis Latv ak no.6:137-140 '60. (EEAI 10:9)

1. Latvijas PSR Zinatnu akademija, Botaniskais darzs.

(Gladiolus) (Hybridization, Vegetable)

VILMANE, M.

Importance of the regulators of growth in propagating certain perennials by sprouts. Vestis Latv ak no.1:131-134 '60. (EEAI 9:11)
(Perennials) (Growth promoting substances)

VILMANE, Milda; NEILANDE, A., red.

[Tulips] Tulpes. Riga, Latvijas Valsts izd-va, 1963. 185 p. [In Latvian] (MIRA 17:6)

NAZAROV, S.N.; VIL'MIZOV, A.G.; MAVLYANOV, A.; MUKHIDOV, A.

Torpedoing oil wells with large charges. Izv. AN Uz. SSR. Ser. tekh. nauk no.5:95-99 '58. (MIRA 11:12)

1.Gornyy otdel AN UzSSR i Geofizicheskaya ekspeditsiya Uzbekskogo geologicheskogo upravleniya.
(Oil well drilling) (Blasting)

VILMON, G.; RETI, E.

Ignac Semmelweis as Head of the Faculty-Library of the Medical School of Budapest. Orv. hetil. 106 no.40:1904-1905 3 O '65.

VILMOS, B.

B. T. R.
Vol. 3 No. 4
Apr. 1954
Metallurgy

160* Opening Speech of Undersecretary Bese Vilmos, at the Bauxite-Alumina Meeting at Aika, on Jun 20-21, 1953. (Hungarian.) *Aluminium (Budapest)*, v. 5, no. 10, Oct. 1953, p. 205-207.

Outlines future tasks of bauxite and alumina industry in Hungary. Discusses maintaining quality of bauxite, discovering new high quality bauxite deposits, developing technology of existing plants, effecting savings in electrical power consumption, training the labor force, and improving quality of aluminum produced.

VILMOS, Endre, dr., egyetemi adjunktus

Some traffic and economic aspects in selecting aircraft types.
Kozl tud sz 13 no.6:248-257 Je '63.

SZABO, Dezso, dr.; CSANADI, Gyorgy, dr.; SARLOS, Istvan; KADAS, Kalman, dr., kandidatus; GYULAI, Geza; VILMOS, Endre, dr.; NAGY, Rudolf, foepornok KOLLER, Sandor, adjunktus; TURANYI, Istvan, dr., tanszekvezeto egyetemi tanar; BENYEI, Andras, dr.; BARANSZKY JOB, Imre; BORSOS, Jozsef, dr., egyetemi tanar; HEGYI, Kalman

The 5th Conference on City Transportation. Epites kozleked tud kozl 7 no.3:341-346 '63.

1. Committee of Highway and City Transportation, Hungarian Academy of Sciences, Budapest (for Csanadi). 2. Executive Commission, Capital City Council, Budapest (for Sarlos). 3. Faculty of Transportation Engineering, Technical University of Building and Transportation, Budapest (for Kadas).4. Head, Directorate of Transportation, Executive Commission, Capital City Council, Budapest (for Gyulai). 5. Technical University of Building and Transportation, Budapest (for Vilmos and Turanyi). 6. Directorate of Transportation, Executive Commission, Capital City Council, Budapest (for Rudolf Nagy). 7. Chair of Road Construction, Technical University of Building and Transportation, Budapest (for Koller). 8. Research Group of Transportation, Hungarian Academy of Sciences, Budapest (for Benyei). 9. National Committee on Technical Development, Budapest (for Baranszky Job). 10. Road and Railroad Planning Enterprise, Budapest (for Hegyi).

VILMOS, Endre, dr. (Budapest)

Analysis of the composition and use of the air fleet of a commericial air line. Letecky obzor 6 no.9:284-286 '62.

VILMOS, Andre, dr.

Economic investigations in case of opening an airline. Kozlekedtudomany kozl 19 no.43:724-727 27 0'63

VILMOS, Endre, dr., egyetemi adjunktus

The effect of air transportation line length on the specific cost. Kozl tud sz 12 no.4:173-176 Ap '62.

VILMOS, Laszlo, Dr., [illegible]

Possibilities for [illegible] transportation in Hungary and [illegible] exports. Kozl szal 34 no. [illegible] 1961.

VILMOS, Endre, Dr.

Effect of special consumers requirement on the average transportation distance. Kozleked kozl 18 no.17:283-286 29 Ap '62.

VIZMAN, F.

Chem. Abs
V.48, 1-10-54,
Methods
and
Apparatus

5

Fluorometric determination of coumarin with a photoelectric colorimeter and application of this method in establishing the coumarin content of sweet clover. Vilmos Ferencz and Lilla Veres (Agrochem. Research Inst., Budapest). *Agrokémia és Talajtn* 2, 65-72(1953).—A cuvet of plexiglas was placed in one cuvet holder, and an uranium glass standard in the other. Color filters absorbing visible light were applied at the cuvet side facing the Hg lamp, greenish-yellow color filters at the cuvet side facing the cell. The degree of reproducibility was satisfactory, the error below 5%. The stock soln. was unchanged for 6 days. The degree of fluorescence was essentially unchanged at 15-40°, but increased with increasing NaOH concns.

István Finály

PROCESSES AND PROPERTIES INDEX

SA

B 64

107. Testing of the rupturing capacity of fuses with a.c. and gas-controlled synchronous circuit breakers. VILMOS, S. P. Elektrotechnika, 40, 180-4 (Aug., 1948) in Hungarian.—A new arrangement for testing the rupturing capacity of fuses on a.c. is described. To obtain comparable results it is imperative to time the instant of switching correctly. For this purpose a rotary contact, controlled by a synchronous motor, is used which passes a positive current impulse, thereby firing a thyratron; a relay controlled by the thyratron current then closes the test circuit. It is more advantageous to produce the firing impulse by a valve and to control the instant of firing by a phase-shift transformer. Oscillograms obtained with this test arrangement for the Hungarian Steel fuses of 100 A rating are reproduced. E. O.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VIL'MOV, N.M.

We do not receive complaints. Za indus.Riaz. no.2:12-14 D '61. (MIRA 16:10)

1. Nachal'nik otdela tekhnicheskogo kontrolya zavoda "Ryaztsvetmet".

137-58-6-12024

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 120 (USSR)

AUTHORS Okunev, A.I., Sarkisov, I.G., Vil'mov, V.M.

TITLE: Fuming of Zinc-bearing and Sulfide-oxide Melts. Possibilities for Intensification of the Process (F'yumingovaniye tsinksoderzhashchikh i sul'fidno-okisnykh rasplavov i vozmozhnosti intensifikatsii etogo protsessa)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 16, pp 16-20

ABSTRACT: Thermodynamic computations show that the reduction of Zn from sulfide compounds, with the aid of CO or C, proceeds at a rate 1/6 to 1/8 that of reduction of Zn from oxide compounds. It is for this reason that in the process of pyroselection the sulfides are initially subjected to air blowing without fluxes, after which the fused oxides are subjected to fuming. However, since any matte, a 20% one for example, contains 6.5-7.5% of O_2 even before the blowing, and since the reduction blowing employs a mixture of air with a reductant, the O_2 content in the sulfide melt is increased. Thus, during blowing of a sulfide-oxide melt the concentration of Zn vapors in the gases is not determined by the reaction between the $CO + CO_2$ and the

Card 1/2

137-58-6-12024

Fuming of Zinc-bearing and Sulfide-oxide Melts. (cont.)

sulfides but rather by a reaction with the melt, one may, therefore, expect a more efficient distillation of Zn than would be the case in reactions between CO and C and the sulfides. In order to verify this deduction, pilot-plant experiments were performed in a converter containing up to 5 tons of melt. The experiments demonstrated that it is possible (in principle) to drive the Zn from the sulfide-oxide melts. The possibility of intensifying the distillation of Zn by means of a reaction in which Zn is displaced from Cu-sulfide was also investigated. For this purpose a quantity of liquid blister Cu was introduced into the converter after a short period of blowing. Experiments have shown that the rate of distillation of Zn from the matte may be increased by 2.5-4 times in the process and that the Zn content in the melt can be reduced from 6-7% to 1% within an interval of 30 minutes.

A.P.

1. Zinc--Separation 2. Slags--Processing 3. Slags--Thermodynamic properties 4. Slags--Chemical reactions 5. Carbon monoxide--Chemical reactions 6. Carbon dioxide--Chemical reactions

Card 2/2

VIL'MS, P.Ya., inzh. (Orsk)

Determining pattern dimensions by an analytic method. Stroi. truboprov. 6 no.7:26 Jl '61. (MIRA 14:8)
(Pipe fittings)

VIL'MS, P.Ya., inzh.

Increasing the training of assembly engineers. Mont. i spets. rab. v stroi. 24 no.5:25 My '62. (MIRA 15:5)

1. Orskoye montazhnoye upravleniye tresta Vostokneftezavodmontazh.

(Building trades--Study and teaching)

VIL'NENSKIY, Ya.Ye.; SAVINKOVA, Ye.I.; BOROVSKIKH, L.A.; SHCHEGROV, L.N.

Chlorination rate of magnesium oxide in a molten chloride. Trudy Ural.politekh.inst. no.96:74-81 '60. (MIRA 14:3)
(Magnesium oxide) (Chlorination)

VILNER, A. M.

17

The food value of castor-oil cake. A. M. Vilner. *Masloboino Delo Zhirovoe* 1931, No. 8-9, 47-53; *Chimie & industrie* 28, 189.—Expts. on the feeding of fowl showed that castor-oil cake could be safely used, provided it was given progressively and carefully in amts not exceeding 30% (and preferably not over 20%) of the total ration. It is suggested that it could also be used advantageously as a stock feed. A. P.-C.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VIL'NER, A. M.: (Professor, Doctor of Veterinary Sciences)

On the problem of the microflora of food affected with grain ticks.

Department of Zoohygine
A. M. Vil'ner, Professor, Doctor of Veterinary Sciences - Head of the Department

SO: Collection of Scientific works, Leningrad Inst. for Advancement of Veterinarians, Ministry of Agriculture USSR. State Agricultural Publishing House, 1950.

VIL'NER, A. M.

VIL'NER, A. M.: (Professor, Doctor of Veterinary Sciences)

Modifications in the composition and losses of nutrient substances occurring in the food affected with grain ticks.

Department of Zoohygiene
A. M. Vil'ner, Professor, Doctor of Veterinary Sciences - Head of the Department

SO: Collection of Scientific Works, Leningrad Inst. for Advancement of Veterinarians, Ministry of Agriculture USSR. State Agricultural Publishing House, 1950.

VIL'NER, A. M.

Winter upkeep of farm animals. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1952. 206 p.

VIL'NER, A. M.

VIL'NER, A. M.: Food poisonings of agricultural animals. Second revised and supplemented edition. Moscow-Leningrad, 1952. 368 pages with illustrations. Price 7 rubles, 40 kopeks, bound. 25,000 copies.

SO: Veterinariya; 30; (3); March 1953; Uncl. TABCON

VIL'NER, A. M. (Professor, Doctor of Veterinary Sciences)

Increase of the resistance of animals toward diseases in the winter period. Zhivotnovodstvo, No 2, 109-112, Feb 1954, (full translation in Vet SRI)

VIL'NER, A.M., professor, doktor sel'skokhozyaystvennykh nauk.

Green fodder system. Nauka i zhizn' 21 no.6:17-18 Je '54. (MLRA 7:6)
(Feeding and feeding stuffs)

ONEGOV, Aleksey Petrovich, prof., doktor veter. nauk; BUKSER, G.V., prof., retsenzent; VIL'NER, A.M., prof., retsenzent; DREVLYANSKAYA, N.I., red.; SOKOLOVA, N.N., tekhn. red.

[Hygiene of farm animals] Gigiena sel'skokhoziaistvennykh zhivotnykh. Izd.2., dop. i perer. Moskva, Sel'khozizdat, 1963. 478 p. (MIRA 17:2)

VIL'NER, A.M.

[Forage poisoning in farm animals] Kormovye otravleniia sel'skokhoziaistvennykh zhivotnykh. Izd.3. perer. i dop. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1959. 438 p. (MIRA 14:8)
(Stock poisoning plants)

VIL'NER, A.M., red.

[Ways of increasing the output of meat, milk, and butter per person; a collection of lectures] Puti uvelicheniia proizvodstva miasa, moloka i masla na dushu naseleniia; sbornik lektsii. Leningrad, 1959. 176 p. (MIRA 13:7)
(Stock and stockbreeding)

USSR/Farm Animals. Swine. Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101202

Author : Vil'ner, A.M., Pereverezev, A.Ye.

Inst : -

Title : Irradiating Piglets with Infrared Rays.

Orig Pub: Zhivotnovodstvo, 1958, No. 1, 46-47

Abstract: Piglets irradiated with IR [infrared] rays had a higher Hb blood content, were more active and grew faster. The fastest growth and development were noted in up to 2-week-old piglets.

Card 1/1

VIL'NER, A.M.

VIL'NER, A.M., prof., doktor vet. nauk; PEREVERZEV, A.Ye., aspirant.

Infrared irradiation of baby pigs. Zhivotnovodstvo 20 no.1:46-47 Ja '58. (MIRA 11:1)

(Swine) (Infrared rays--Physiological effect)

PROTASOV, A.I., dotsent; SINEV, A.V., prof.; SMIRNOV, A.M., dotsent; BAZHENOV, A.N., dotsent; VIL'NER, A.M., prof.; BASHMURIN, A.F., dotsent; SHAKALOV, K.I., prof.; VELLER, A.A., prof.; NIKANOROV, V.A., prof.; FEDOTOV, V.P., dotsent; KUZNETSOV, G.S., prof.; BOCHAROV, I.A., prof.; SHCHERBATYKH, P.Ya., prof.; TSION, R.A., prof.; GRIBANOVSKAYA, Ye.Ya., dotsent; ADAMANIS, V.F., assistent; KOLABSKIY, N.A., dotsent; MITSKEVICH, V.Yu., dotsent; GUSEVA, N.V., dotsent; MYSHKIN, P.P., dotsent; GUBAREVICH, Ya.G., prof.; FEDOTOV, B.N., prof.; DOBIN, M.A., dotsent; SIROTKIN, V.A., prof. [deceased]; KUZ'MIN, V.V., prof.; YEVDOKIMOV, P.D., prof.; POLYAKOV, A.A., prof.; POLYAKOV, P.Ya., red.; BARANOVA, L.G., tekhn.red.

[Concise handbook for the veterinarian] Kratkii spravochnik veterinarnogo vracha. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 624 p. (MIRA 13:12)

(Veterinary medicine)

25820

S/142/60/003/006/010/016
E140/E135

6,7500

AUTHORS: Breskin, V.A., Vil'ner, A.Ye., and Lev, A.Yu.

TITLE: On the approximation of a binary message by a Markov chain

PERIODICAL: Izvestiya vysshikh uchebnykh zavedaniy, Radiotekhnika, 1960, Vol.3, No.6, pp. 636-643

TEXT: The article concerns the best approximation of a binary message by a Markov chain. The illustrative material of the article is concerned with the binary signal obtained from the facsimile transmission of line drawings. The closeness of a given statistical model to the events it approximates can be defined in various ways. One of the most frequently used criteria is the minimum mathematical expectation of some power of the error magnitude. In the present article two methods of calculating the parameters of higher-order Markov chains are examined. The first uses as the initial data the probability distributions of the length of black and white bars. In the second method the basic statistic is the distribution of black-white combinations for 1, 2, 3 time units. It is found that the second method yields a Markov

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On the approximation of a binary ... S/142/60/003/006/010/016
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chain which corresponds much more closely to the statistical characteristics of the actual message. The author points out that this is not accidental, since the important statistical properties of the message and the Markov chain are more correctly described by the combinations than by the simple duration distributions. In particular, it is found that the facsimile signal for line drawings can be sufficiently well approximated by the Markov chain C^2_2. There are 2 figures, 4 tables and 5 Soviet references.

ASSOCIATION: Kafedra dal'ney svyazi Odesskogo elektrotekhnicheskogo instituta svyazi

(Department of Telecommunications, Odessa Electrotechnical Institute of Communications)

SUBMITTED: December 10, 1959

Card 2/2

BRESKIN, V.A.; VIL'NER, A.Ye.; LEV, A.Yu.

Approximation of duplex communications by means of Markov chains. Izv. vys. ucheb. zav.; radiotekh. 3 no.6:636-643 N-D '60. (MIRA 14:8)

1. Rekomendovana kafedroy dal'ney svyazi Odesskogo elektrotekhnicheskogo instituta svyazi.
(Information theory) (Markov processes)

VIL'NER, B. (Kiyev); SYUN'I G. (Kiyev); GONCHARENKO, F. (Kiyev); RUDENKO, D. (Kiyev)

Constructing and repairing asphalt concrete pavements in Kiev. Zhil.-kom.khoz. 10 no.4:27-28 '60. (MIRA 13:6)

(Kiev--Pavements, Concrete)

VIL'NER, B., kandidat geograficheskikh nauk; SELIVANOV, M., inzhener-gidrograf.

Gyrocompass in the Arctic. Mor.flot 17 no.6:24 Je '57. (MIRA 10:7)

1. Glavnoye upravleniye severnogo morskogo puti.
(Arctic regions--Gyrocompass)

BELOBROV, Andrey Pavlovich. Prinimali uchastiye: BASKIN, A.S., inzh.-gidrograf; BOGDANOV, I.A., inzh.-gidrograf, dots.; VIL'NER, B.A., inzh.-gidrograf; VOLKOV, P.D., inzh.-gidrograf; GORSHKOV, N.M., inzh.-gidrograf; CHUKOV, Ye.P., inzh.-gidrograf; YASHKEVICH, Ye.V., inzh.-gidrograf; STUPAKOVA, L.A., red.

[Marine hydrography] Gidrografiia morya. Moskva, Transport, 1964. 514 p. (MIRA 17:9)

BELOBROV, Andrey Pavlovich; VIL'NER, B.A., otv. red.; VLASOVA, Yu.V., red.; BRAYNINA, M.I., tekhn. red.

[Radio navigation phase systems in hydrography and oceanography] Fazovye radionavigatsionnye sistemy v gidrografii i okeanologii. Leningrad, Gidrometeor. izd-vo, 1961. 169 p. (MIRA 14:7)
(Radio in navigation)

VIL'NER, B. Ya., Cand. Medic. Sci. (diss) "Physiological Lability (Optimum - Pessimum Frequencies of Stimulation) of Nerve-Muscle Apparatus in Case of Some Illnesses of the Nervous System," Riga, 1961, 21 pp. (Acad. of Sci. Latv. SSR, Inst. Experim. and Clinical Med.) 350 copies (KL Supp 12-61, 283).

VIL'NER, B.Ya.

Mechanism of action of Bernard's currents. Dokl.AN BSSR 5 no.5: 226-229 My '61. (MIRA 14:5)

1. Institut fiziologii AN BSSR. Predstavleno akademikom AN BSSR D.A. Markovym.

(Electrotherapy)

BAGEL', G.Ye.; VIL'NER, B.Ya.

Mechanism of the ultrasonic effect in the treatment of pain. Dokl. AN BSSR 9 no.9:633-636 S '65. (MIRA 18:11)

1. Belorusskiy gosudarstvennyy institut usovershenstvovaniya vrachey i Institut fiziologii AN BSSR. Submitted April 9, 1965.

VIL'NER, B.Ya.

Methods of stuying and evaluating physiological lab'lity indices (optimum-pessimum stimulation frequency) of the neuromuscular apparatus. Vestsi AN BSSR Ser. biial. nav. no.2: 59-67 '63 (MIRA 17:3)

MARKOV, D.A., prof.; GRENADER, A.B.; VIL'NER, B.Ya. (Minsk)

Treatment of pain syndromes with Bernard's currents. Klin. med. 41 no.9:86-91 S'63 (MIRA 17:3)

1. Iz kafedry nervnykh bolezney Belorusskogo instituta usovershenstvovaniya vrachey i laboratorii neyrofiziologii Instituta fiziologii AN BSSR.

VIL'NER, B.Ya.; LEONOVICH, A.L.

Importance of functional stress tests in the early diagnosis of disseminated sclerosis. Dokl. AN BSSR 7 no.1:62-65 Ja '63. (MIRA 17:1)

1. Institut fiziologii AN BSSR i Belorusskiy gosudarstvennyy institut usovershenstvovaniya vrachey. Predstavleno akademikom AN BSSR D.A. Markovym.

VIL'NER, B.Ya.

Relation between the state of physiological ability of the neuro-muscular apparatus and changes in the muscle tone. Vestsi AN BSSR. Ser. biial. nav. no.3:56-60 '60. (MIRA 14:1)
(MUSCLES) (NERVES)

VIL'NER, B.Ya.

Physiological lability of the neuromuscular apparatus as an indication of the functional state of the central nervous system in cases of vascular impairment. Dokl. AN BSSR 4 no. 11:482-485 N '60. (MIRA 13:12)

1. Institut fiziologii AN BSSR. Predstavleno akademikom AN BSSR D.A. Markovym.

(BRAIN—BLOOD VESSELS—DISEASES)

VIL'NER, Bertol'd Yakovlevich; DOROSHEVICH, Engel'S Konstantinovich; PESHES, Leonid Yakovlevich; VEYNIK, A.I., nauchn. red.

[Essays on cybernetics] Ocherki po kibernetike. Minsk, Nauka i tekhnika, 1965. 154 p. (MIRA 18:3)

1. Chlen-korrespondent AN Belorusskoy SSR (for Veynik).

VIL'NER, G.S.

Device for precise setting up of boring bar blades. Ratsionalizatsiia 14 no.4:19 '64.

VIL'NER, G.S.

Diamond tips. Standartizatsiia 25 no.1:50-52 Ja '61. (MIRA 14:3)
(Diamonds, Industrial—Standards)

VIL'NER, B.Ya.

Physiological lability of the neuromuscular apparatus in epileptics. Vestsi AN BSSR. Ser. biial. nav. no. 4:66-74 '60. (MIRA 14:1)
(Epilepsy)

LOPAREV, Ya.P.; KULAKOVSKIY, M.G.; VIL'NER, D., inzh.; BUTKEVICH, A.V., kand.tekhn.nauk; STYCHKOV, M.I., starshiy fotolaborant; KRAMARENKO, V., starshiy tekhnik-stereotipograf; SHREYBER, N.V., inzh.

Readers' letters. Geod. i kart. no.9:65-73 S '58. (MIRA 11:10)

1. Glavnyy inzh. Yakutskogo aerogeodezicheskogo predpriyatiya (for Loparev). 2. Glavnyy inzh. otryada No.78 Kazakhskogo aerogeodezicheskogo predpriyatiya (for Kulakovskiy). 3. Sverdlovskoye aerogeodezicheskoye predpriyatiye (for Vil'ner). 4. Novosibirskiy institut inzhenerov geodezii aerofotos"yemki i kartografii (for Butkevich). 5. Moskovskoye aerogeodezicheskoye predpriyatiye (for Stychkov). 6. Trest "Geotopos"yemka," (for Kramarenko). 7. Novosibirskoye aerogeodezicheskoye predpriyatiye (for Shreyber).
(Geodesy) (Cartography)

V. L. Nesterov, D. G.

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AUTHOR: Sokolova, O. I.

TITLE: Results of the Competition for the Best Improving Suggestion (Itogi konkursa na luchshiye ratsionalizatorskiye predlosheniye)

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ABSTRACT: In May 1959, the ordinary competition for the best improving suggestion in the field of topographic-geodetic and cartographic production was concluded at the Glavnoye upravleniye geodezii i kartografii MVD SSSR (Main Administration of Geodesy and Cartography of the Ministry of Internal Affairs of the USSR). 7 aerogeodetic services, 8 cartographic institutes and NRKCh took part. A total of 30 topographic-geodetic, and 31 cartographic, suggestions were submitted. The 1st prize of 1,000 rubles was awarded to V. A. Morozov and V. V. Drusov (Minskaya kartograficheskaya fabrika (Minsk Cartographic Plant) for the "Seamless Fastening of Atlas Blocks". The 2nd prizes of 750 rubles were awarded to: 1) Ya. I. Bratalanskiy, V. M. Varnugin, Yu. N. Galitskiy, O. P. Shetler and V. P. Stepanov (NRKCh) for "Technology of the Use of Standard Bases (Tipovaya OSNova)". 2) I. V. Gurevich, V. M. Varnugin, E. O. Kadovil'skaya, O. P. Shetler, L. I. Skarkaya for "Technology of the Manufacture of Combined Diapositives" (NRKCh). 3) D. A. Larin (Moskovskoye AGP (Moscow AGP)) for "Reduction of Work in Evaluating the Accuracy of Symmetric Geodetic Nets Formed by Figures of Regular Shape". 4) N. V. Shreyber (Novosibirskoye AGP (Novosibirsk AGP)) for "Light, Collapsible Ladder of Dural for Prospecting". - The 3rd prizes of 500 rubles each were awarded to : 1) I. P. Shevalin (Yakutskoye AGP (Yakutsk AGP)) for "Establishment of Fixed Points by the Method of Thawing by Means of Vapor". 2) I. D. Ol'shanskiy (Yakutskoye AGP (Yakutsk AGP)) for "Construction of an Overhead Trolley for Timber Transport". 3) I. A. Kysin (Moskovskoye AGP (Moscow AGP)) for "Variation in the Attachment of Photographs on the STD-2". 4) V. P. Zarubin (Moskovskoye AGP (Moscow AGP)) for "Raising ~~of Geodetic Signs~~ by 5-7 Meters". 5) D. T. Smirnov, I. V. Gurevich, E. I. Aleksandrova, V. M. Varnugin, V. K. Kirillov and V. Ya. Kiblyskov (NRKCh) for "Technology of the Completion and Edition of Topographic Maps by the Photorelief Method". 6) M. P. Glushenin (Minskaya kartograficheskaya fabrika (Minsk Cartographic Institute)) for "Vertical Piling Machine for Brochures". 7) A. A. Vaukov (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)) for "Mechanism for the Loading of Trucks With Paper Rolls". 8) A. M. Yashchenko (Ukrainskoye AGP (Ukrainian AGP)) for "Replacement of the Arc Lamp for the Heliographic-printing Machine KP-1 by an Illuminating Device With Luminescent Lamps DS-40". 9) G. K. Grigor'yev (Sverdlovskoye AGP (Sverdlovsk AGP)) for "Ruler for Drawing in the Preparation of Map Compilations and Final Compilations". 10) [illegible] Israilov (Severo-Zapadnoye AGP (North-west AGP)) for "Improvement of the Contact Mechanism in the Micrometer by Yoder". 11) S. M. Ambrayev (Moskovskoye AGP (Moscow AGP)) for "Formulas and Form for a More Rational Computation of Superelevations From the Trigonometric Leveling". 12) [illegible] Vil'ner (Sverdlovskoye AGP (Sverdlovsk AGP)) for "New Numbering and Painting of Leveling Staffs". 13) [illegible] (Moskovskoye AGP (Moscow AGP)) for "Formulas and Table for Extreme Divergences Between the Free Terms of Polar and Base Conditions Computed on a Plane and on a Ball". - Besides, the following suggestions were approved by the jury: 1) [illegible] Trykov (Sverdlovskoye AGP (Sverdlovsk AGP)), "Underframe for Observations From the Telescopic Tower". 2) P. F. Zaitskiy

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Results of the Competition for the Best Improving Suggestion

(Severo-Zapadnoye AGP (North-west AGP)) Template (pattern) for Determining the Corrections of Centering and Reducing With an Auxiliary Scale for Determining the Corrections of the Curvature of the Image of the Geodetic Line and of the Spheric Excess". 3) V. G. Maurzyar (Moskovskoye AGP (Moscow AGP)) . "Variation of the Construction of the Heliotrope". 4) G. M. Shlefendorf (Moskovskoye AGP (Moscow AGP)), "Zero Thermostat for the Gravimeters of the GAK-2M-type". 5) P. I. Popov (Moskovskoye AGP (Moscow AGP)), "Device for Cutting Aluminum". 6) A. I. Fikhman and G. M. Grinberg (Moskovskoye AGP (Moscow AGP)), "Prospecting Mast". 7) Ya. I. Negnevitskiy, N. A. Pashukevich and M. Ya. Glushanin (Minskaya kartograficheskaya fabrika (Minsk Cartographic Institute)), " A Workbench Device for Mixing Offset Colors". 8) I. L. Gintsberg (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)), "Device for Grinding the Edges of Plate Glass". 9) A. A. Yaukov (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)), a) "Mechanism for Inclining the Grinding Case". b) "Mechanism for Lifting the Trough With the Balls". 10) V. I. Yurchenko and S. A. Lonshteyn (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)), "Automatic Switch-off of Arc Lamps". 11) I. V. Vasil'yeva (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Plant), "Increase in the Durability of Light-sensitive Rubber Solution (Adhesive)". 12) V. M. Sher (Kiyevskaya kartograficheskaya fabrika (Kiyev Cartographic Plant), "Correspondence of the Stroke-elements on Topographic Maps With the Letters on the Machine Printing Forms". 13) V. V. Bozrikov, S. P. Yakunin (Rizhskaya kartograficheskaya fabrika (Riga Cartographic Plant), "On the Improvement in the Construction of Mechanisms for Pressing-on the Inking Rollers and Friction Drums on the Offset Machines 'Planeta-Super-Kviata'". 14) A. Ya. Simanovskiy (Rizhskaya kartograficheskaya fabrika (Riga Cartographic Plant), "A Rational Method of Making Positives of Printing Forms of Relief Printing on Tracing Paper for Printing Books on Offset Machines". 15) O. M. Yankovskiy (Rizhskaya kartograficheskaya fabrika (Riga Cartographic Plant), "Synchronization and Automatization of the Switching on and off of Arc Lamps and of the Suction Fan in the Copying Department". 16) V. P. Alampiyev (Rizhskaya kartograficheskaya fabrika (Riga Cartographic Plant), "Variation in the Technology of Making Sets of Outline Maps of the Fifth Class" 17) V. V. Il'yushin (Rizhskaya kartograficheskaya fabrika (Riga Cartographic Plant), "Preparation of Collecting- and Corresponding Positives by the Method of the Washed-out Relief on 'vinipros'". 18) V. M. Pudochkin (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant), "Switching off the Motor of the Compressor on the Copying Frame by Means of the Change Lever for Lifting the Glass and by Means of the Vacuum". 19) D. I. Matkava (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant), "Device for Laying on the Negatives in Copying". 20) N. M. Serkin (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant), "Device for Drying Paper on Offset Machines". 21) S. M. Konstantinova (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant), "Progressive Method and Procedure for the Preparatory Work in Calculating and Plotting the Geographic Network on Maps to Be Compiled". 22) K. I. Mironov (NRKCh) "A Workbench for Repairing the Guides of the Offset Machine". 23) Yu. P. Tarasov (NRKCh) "Device for Regulating the "taler" of the Offset Machine". 24) Ye. I. Klyuchanskaya and S. V. Nesterova (NRKCh) "Improving the Method of Precipitating the Silver Nitrate in Used Solutions".

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VIL'NER, D.G.

Interpretation of details of a situation not recorded on an aerial photograph. Geod.i kart. no.6:63 Je '62. (MIRA 15:8)
(Aerial photogrammetry) (Photographic interpretation)